
DEPARTMENT OF
TRANSPORTATION

Research and Special Programs Administration

49 CFR Part 195

[Docket No. RSPA-97-2095;
Amendment 195-66]

[RIN 2137-AC 11]

Pipeline Safety: Adoption of Consensus Standards for Breakout Tanks

AGENCY: Research and Special Programs Administration (RSPA), DOT.

ACTION: Final Rule.

SUMMARY: This final rule incorporates by reference consensus standards for aboveground steel storage tanks into the hazardous liquid pipeline safety regulations. These standards apply to the design, construction, and testing of new tanks, and the repairs, alterations and replacement of existing tanks. All new and existing breakout tanks are also subject to the operating and maintenance requirements specified in this rule. The incorporation by reference of these thirteen standards will significantly improve the minimum level of safety applicable to the transportation and storage of petroleum and petroleum products at breakout tanks throughout the United States.

DATES: *Effective Date:* This final rule takes effect May 3, 1999. The incorporation by reference of certain publications listed in the rule is approved by the Director of the **Federal Register** May 3, 1999.

Compliance date: Except under §195.432, compliance with consensus standards that are incorporated by reference is not required until October 2, 2000.

FOR FURTHER INFORMATION

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Comments may be accessed electronically at <http://dms.dot.gov>. General information about the RSPA/Office of Pipeline Safety programs can be obtained by accessing OPS's Internet home page at <http://ops.dot.gov>.

**SUPPLEMENTARY
INFORMATION:**
Background

The failure of a storage tank not associated with pipeline transportation provided much of the incentive to improve consensus standards for aboveground steel storage tanks. On January 2, 1988, at a barge terminal in Floreffe, Pennsylvania, a newly recommissioned storage tank suddenly collapsed and released 3.9 million gallons of diesel oil. Although the earthen dike contained most of the diesel oil, an estimated 750,000 gallons were spilled into the Monongahela River and eventually flowed into the Ohio River.

The publicity and costly consequences of this failure caused widespread concern about the safety of all aboveground storage tanks. Responding to the aftermath of this event, petroleum industry engineers and the American Petroleum Institute considerably updated existing standards and developed several new standards.

In the 10-year period from 1987-1996, operators of breakout tanks reported 152 accidents to RSPA. These accidents caused no deaths; three injuries to pipeline personnel; \$12,422,894 of property damage; and

153,972 spilled barrels. The causes were reported as: 25 leaks in the tank floor; 30 incorrect operations; 8 outside forces; and 26 malfunctions of control or relief equipment. The remaining 63 were related to problems with floating roof water drain lines, lightning, and miscellaneous other causes.

The pipeline safety regulations have not been revised to reflect the updating and development of new consensus standards for aboveground steel storage tanks. Instead, they remain very limited in scope and too general to address many safety-related aspects.

Consequently, RSPA recognizes the need to update the safety regulations for breakout tanks. The most appropriate means of updating is the incorporation by reference into Part 195 of selected consensus standards. They are widely understood and have been extensively implemented by the operators of breakout tanks.

RSPA provided operators of breakout tanks, the petroleum industry and the general public the opportunity to provide early input on RSPA's intent to incorporate consensus standards for storage tanks through public meetings.

RSPA contracted with the Texas Transportation Institute (TTI) to obtain professional assistance in the selection of consensus standards to be incorporated into the breakout tank regulations. TTI is associated with Texas A&M University at College station, Texas.

All consensus standards are being adopted on a prospective basis, meaning design, construction and testing requirements apply to new tank construction and future repairs, alterations or replacements of existing tanks. Operating and maintenance requirements apply to future operating and maintenance activities. The deadlines for compliance with the new requirements are specified in the appropriate sections of this rule.

For additional background information regarding this rule please refer to the Notice of Proposed Rule-making (NPRM) [63 FR 27903; May 21, 1998].

Proposed Rule

RSPA published an NPRM (63 FR 27903; May 21, 1998), proposing to incorporate 12 consensus standards for aboveground breakout storage tanks into 49 CFR Part 195. In addition, a 13th consensus standard, API 510, has been added for inspection of high pressure vessels built to API standard 2510. The NPRM requested interested persons to submit comments by July 20, 1998. It was also stated that late filed comments would be considered as far as practicable. We received comments from nine sources including American Petroleum Institute (API) and U.S. Environmental Protection Agency (EPA) prior to 7/20/98. After which, API and EPA filed second set of comments on 10/19/98 and 12/3/98 respectively.

Final Rule

This final rule incorporates consensus standards for aboveground breakout storage tanks into 49 CFR Part 195. Currently §195.3 lists 18 publications that have been incorporated by reference into Part 195. This rule now incorporates all or parts of an additional six API standards (510, 620, 650, 653, 2000 and 2510), one API Specification (12F), four API Recommended Practices (651, 652, 2003 and 2350), one API Publication (2026), and NFPA 30.

Subpart A--General.

Revised §195.1(c) explains the applicability of Part 195 to breakout tanks. It further explains that anhydrous ammonia breakout tanks need not comply with certain requirements in Part 195.

Listed below are 13 standards incorporated by reference wholly or partially. For further information about these documents please refer to the NPRM [63 FR 27903; May 21, 1998] or the individual standards.

1. API SPECIFICATION 12F--Specification for Shop Welded Tanks for Storage of Production Liquids, Eleventh Edition, November 1, 1994.

2. API 510--Pressure Vessel Inspection Code: Maintenance Inspection, Rating, Repair, and Alteration, Eighth Edition, June 1997.

API 510 has been added for purposes of inspection of high pressure breakout tanks built to API standard 2510.

3. API STANDARD 620--Design and Construction of Large, Welded, Low-Pressure Storage Tanks, Ninth Edition, February 1996 (Including Addenda 1 and 2).

4. API STANDARD 650--Welded Steel Tanks for Oil Storage, Ninth Edition, July 1993 (Including Addenda 1 through 4).

5. API RECOMMENDED PRACTICE 651--Cathodic Protection of Aboveground Petroleum Storage Tanks, Second Edition, Dec. 1997.

6. API RECOMMENDED PRACTICE 652--Lining of Aboveground Petroleum Storage Tank Bottoms, Second Edition, December 1997.

7. API STANDARD 653--Tank Inspection, Repair, Alteration, and Reconstruction, Second Edition, December 1995 (Including Addenda 1 and 2).

8. API STANDARD 2000--Venting Atmospheric and Low-Pressure Storage Tanks, Fourth Edition, September 1992.

9. API RECOMMENDED PRACTICE 2003--Protection Against Ignitions Arising Out of Static, Lightning, and Stray Currents, Sixth Edition, September 1998.

10. API PUBLICATION 2026--Safe Access/Egress Involving Floating Roofs of Storage Tanks in Petro-

leum Service, Second Edition, April 1998.

11. API RECOMMENDED PRACTICE 2350--Overfill Protection for Storage Tanks In Petroleum Facilities, Second Edition, Jan. 1996.

12. API STANDARD 2510--Design and Construction of LPG Installations, Seventh Edition, May 1995.

13. NFPA 30--Flammable and Combustible Liquids Code, 1996 Edition.

Subpart C--Design Requirements

The revised §195.132 now includes requirements for critical engineering subjects, such as materials, design, fabrication, erection, methods of inspecting joints, welding procedure and welder qualifications, and marking. It also contains other important topics including foundations, external floating roofs, seismic design, aluminum dome roofs, internal floating roofs, inspection and testing, and requirements for operating at elevated temperatures. These topics are typical of the engineering subjects covered by incorporating by reference the following standards:

(1) API Specification 12F for shop-fabricated tanks with vapor space pressure that are approximately atmospheric with capacity of 90 to 750 barrels.

(2) API Standard 650 for atmospheric pressure tanks with pressures not greater than 2.5 psig.

(3) API Standard 620 for low pressure tanks with vapor space pressures not greater than 15 psig.

(4) API Standard 2510 for LPG tanks with capacity of 2000 gallons or more and pressures greater than 15 psig.

Subpart D--Construction

A new §195.205 on Repair, alteration and reconstruction of breakout tanks that have been in service requires that tanks built to API 650

and API 12C are to be modified in accordance with API Standard 653. Also, tanks built to API 620 may be modified by the design, welding examination and testing provisions of API standard 653 in proper conformance with the stresses, joint efficiencies, material and other provisions in API standard 620. For tanks built to API 2510 modifications are to be performed in accordance with the API 510.

In §195.242 requirements for cathodic protection have been amended for the aboveground tanks by referencing API Recommended Practices 651 for the bottoms of the tanks and API Recommended Practices 652 for the internal lining of the tank bottom.

In §195.264, requirements for impoundment, protection against entry, normal/emergency venting and pressure/vacuum relief for the above ground breakout tanks have been revised. In addition some requirements of NFPA 30 have been added for impoundment by diking.

Subpart E--Pressure Testing

A new §195.307 requires pressure testing of breakout tanks newly placed in service or returned to service after 18 months. Testing requirements reference specified tank standards.

Subpart F--Operation and Maintenance

A new §195.405 requires protection against ignitions and safe access/egress involving floating roofs in accordance with API RP 2003.

Section 195.416 has been amended by adding a provision for the inspection of cathodic protection systems for breakout tanks in accordance with API RP 651.

Section 195.428 has been amended by adding provisions for the installation of over pressure safety devices and overfill protection sys-

tems in accordance with API RP 2350 and API Standard 2510.

Section 195.432 has been revised to provide maintenance inspection of breakout tanks and diking in accordance with the provisions of API Standard 653, and API Standard 2510.

Discussion of Comments

We received comments from the following sources in response to the NPRM:

Trade associations: American Petroleum Institute (API); The Fertilizer Institute (TFI); Steel Tank Institute (STI); and Independent Liquid Terminals Association (ILTA)
Standards organization: National Fire Protection Association (NFPA)
Pipeline operators: Conoco Pipeline Company (CONOCO); TE Products Pipeline Company (TEPPCO); and Amoco Pipeline Company (AMOCO)
Federal agency: United States Environmental Protection Agency (EPA)

In addition, as discussed under another heading below, the Technical Hazardous Liquid Pipeline Safety Standards Committee considered and submitted a report on the proposed rules.

Five of the nine commenters (API, AMOCO, CONOCO, TEPPCO, NFPA) generally supported the NPRM, but expressed concerns or suggested changes, CONOCO by endorsing API's views. EPA opposed our regulatory approach of referencing consensus standards, but nevertheless submitted comments on specific issues. Of the remaining three commenters, TFI and ILTA raised particular points about the NPRM, and STI recommended additional standards to incorporate by reference.

We did not consider the additional consensus standards STI suggested because the suggestions were not tied to any particular aspect of the NPRM. All other significant comments on the NPRM are summarized in this section of the preamble, where

we also explain our response to those comments.

Organization of Breakout Tank Rules

API commented that all substantive regulations on breakout tanks should be consolidated in a single subpart in Part 195, rather than scattered among several subparts.

We did not adopt this suggestion because we consider it impractical. Part 195 defines a "pipeline system" to include breakout tanks. Breakout tanks also come within the meaning of "pipeline facility" as defined in Part 195. Consequently, apart from the final rules in this document, there are many substantive regulations in Part 195 governing pipeline facilities or pipeline systems that apply to breakout tanks. For example, the accident reporting requirements in Subpart B, the operations and maintenance manual requirements in §195.402, and the training requirements in §195.403 apply to breakout tanks because these regulations cover all parts of a pipeline system. So to combine all the substantive requirements for breakout tanks in a single subpart would require duplicating many regulations or making many cross references, and neither approach is desirable.

Still we believe readers could benefit from more direction on how to recognize which Part 195 regulations apply to breakout tanks. So we have replaced §195.1(c) to explain the applicability of Part 195 to breakout tanks. We also revised §195.1(c) by deleting certain compliance deadlines that have expired.

Incorporation by Reference

Two commenters indicated there is possibly some confusion over the exact composition of matter incorporated by reference. First, TEPPCO asked whether a document or part of a document that is referenced by material incorporated by reference is

similarly incorporated by reference. AMOCO declared that such internal references have no regulatory force. On the contrary, we believe if a document part that is incorporated by reference refers to a separate part of the same document or another document, compliance with that separate part is required if it is necessary for compliance with the original referenced document part. If the internal reference is informational or advisory and not necessary for compliance, then operators are not obliged to comply with it.

TEPPCO and API suggested that we amend the section in Part 195 that lists referenced documents (§195.3) to state which parts of the documents are incorporated by reference if the whole document is not incorporated. Section 195.3(a) now provides that an entire document is not incorporated by reference in Part 195 when only a part of the document is referenced. Whether an entire document or only part of a document is referenced depends on the scope of the reference in the Part 195 section that states the reference. For example, under proposed §195.132, certain breakout tanks would have to be designed and constructed in accordance with certain API documents. Thus, all provisions of the API documents that apply to design and construction of breakout tanks would be incorporated by reference. If those provisions are found in only parts of the documents, then only those parts would be incorporated by reference. But if an entire document governs design and construction, the entire document would be incorporated by reference. Although we do not think it would be practical to duplicate in §195.3 the scope of the various references included throughout Part 195, we are amending the lead-in to §195.3(c) to clarify that the listed publications may be referenced in whole or in part in Part 195.

Engineering Judgment

API commented that its consensus standards were developed as an aid to engineering judgment, not as a replacement for it. It said that its consensus standards may not fit every tank situation and were not intended to be strictly met. Therefore, API suggested that in enforcing the standards, we recognize the need for engineering judgment and look for attainment of objectives (such as tank integrity and release prevention) rather than strict adherence to the terms of the standards.

On this issue, EPA noted that in many of API's consensus standards the requirements are optional. A document's foreword may permit operators not to meet sections they consider unnecessary to follow in particular circumstances. As an example, EPA cited API 653 (referenced in proposed Secs. 195.205, 195.307, and 195.432) in which the foreword states "If tanks are inspected, repaired, altered, or reconstructed in accordance with this standard, the owner/operator may elect to modify, delete, or amplify sections of this standard."

In the NPRM, we proposed the following levels of compliance for the different types of API and NFPA documents that would be incorporated by reference:

- **Standard, Specification or Code**--An operator would be expected to comply with the provisions.
- **Recommended Practice**--An operator would be expected to follow the provisions unless the operator notes in the procedural manual the reasons why compliance with all or certain provisions is not necessary for the safety of a particular breakout tank or tanks.
- **Publication**--These provisions provide guidelines, safety practices and precautions for the operator's review and consideration for inclusion in the procedural manual.

By this proposal we meant that operators would have to meet the referenced parts of standards, specifications, and codes according to the terms of those parts. Although operators could decide not to abide by referenced parts of recommended practices or publications, we did not intend for them to have this same discretion regarding compliance with referenced parts of standards, specifications, or codes. Therefore, in the final rules, none of the references to parts of standards, specifications, or codes may be interpreted to include a statement in the document's foreword or elsewhere outside the referenced part that would absolve the operator of its responsibility to comply with the referenced part. For example, the statement in section 1-1.3 of NFPA 30 that the code does not apply to "[t]ransportation of flammable and combustible liquids, as governed by the U. S. Department of Transportation" does not nullify the references to particular sections of NFPA 30 in final §195.264.

Nonetheless, if the referenced part of a standard, specification, or code allows or calls for the use of engineering judgment, in determining compliance with the referenced part, we will not object to the use of judgment. We will, however, compare the judgment used against what is reasonable under the circumstances. If an operator wishes to achieve a particular objective in a way that differs from the referenced part of a standard, specification, or code or falls outside the range of allowable judgment, it can request permission to do so by applying to us or the appropriate state agency, as applicable, for a waiver of the referenced part (see 49 U.S.C. 60118).

EPA also raised an enforcement issue with regard to the proposed references to API recommended practices (Secs. 195.242 (c) and (d), 195.405, 195.416(j), and 195.428(c)). EPA said that although an operator would have to include in its proce-

dural manual its reason for not applying a practice to a particular tank, the proposal did not provide a way for us to order compliance with the practice if we do not agree with the operator's reason.

This additional provision is not needed, however, because operators' procedural manuals are subject to review and amendment by our enforcement personnel. Under the enforcement procedures in 49 CFR 190.237, if our enforcement personnel have reason to believe an operator's operations and maintenance procedures are inadequate for safety, they conduct proceedings to determine the adequacy and can order the operator to change any procedures found inadequate. In addition, under 49 CFR 190.233, we can order immediate corrective action for any pipeline facility that we believe poses a serious threat to life or property.

Performance Standards v. Consensus Standards

EPA stated that requiring operators to apply consensus standards would lock them into present-day technologies and practices, and prevent them from using innovative techniques until we grant special approvals or reference a later consensus standard that permits the new techniques. As an alternative approach, EPA recommended that we adopt tank rules that establish the level of performance to be achieved, leaving operators free to use the latest technologies and practices to achieve it.

In contrast, API pointed out that its standards are regularly revised and reflect constant improvement by committees of experts, so that use of new technologies is not discouraged. API also noted that we have been amending our pipeline safety standards to stay apace with changes to referenced consensus standards.

We recognize the advantage of performance standards, and Part 195 has many standards of this kind. But

it also has standards that incorporate consensus standards by reference. Consensus standards have been referenced when performance standards were not available or could not be developed soon enough to meet the need for safety regulation. Still, in our experience, referencing consensus standards has not stymied the use of new pipeline technologies. As API said about its own standards, most of the referenced standards are updated regularly. Moreover, our pipeline safety regulations allow operators to use new technologies permitted under the latest editions of referenced consensus standards as long as the new technology does not result in less safety than required by the referenced edition (see §195.101).

Environmental Protection

EPA said that regulations other than the proposed referenced standards would be needed to protect the environment adequately against potential tank spills. It said operators should be required to evaluate breakout tank areas and provide facilities, equipment, or practices at critical locations to prevent possible major oil discharges from leaving the breakout tank area. EPA also recommended that we require proper security measures to protect against releases from vandalism.

This comment did not acknowledge our many existing regulations for breakout tanks that require evaluation and preventive practices to guard against environmental damage. For instance, §195.402(c)(4) requires operators, as part of their detailed operations and maintenance plan, to determine which facilities would require an immediate response to prevent hazards. §195.403(a)(3) requires training to recognize conditions likely to cause emergencies in the event of malfunctions or failures; and under §195.436, operators must protect breakout tank areas against vandalism and unauthorized entry. Further

regulations in 49 CFR Part 194 require operators to develop and follow contingency plans for responding to spills from breakout tanks, and to provide adequate resources for oil spill response. Even more environmental protection would be required by the proposed rules that reference consensus standards, especially those standards for corrosion control of tank bottoms and spill impoundment. Therefore, we think the combination of existing breakout tank regulations and those we are adopting in this final rule will result in an adequate level of environmental protection. But we will continue to monitor the safety and environmental record of breakout tanks and take any further action that is warranted by new circumstances.

Overlapping Federal Regulation of Breakout Tanks

ILTA voiced concern about the dual federal regulation of storage tanks at for-hire and marketing terminals. This commenter noted correctly that a storage tank comes under the definition of "breakout tank" in Part 195 if it receives a petroleum product by pipeline and then reinjects it into a pipeline for continued transportation. It said the tank would be subject to EPA's Spill Prevention Control and Countermeasure (SPCC) regulations if it can also transfer the product to another mode of transit serving the terminal. ILTA also pointed out that our present definition of "breakout tank" is not supported by the 1971 memorandum of understanding (MOU) between DOT (U.S. Coast Guard) and EPA on transportation-related facilities (40 CFR Part 112, App. A), and urged us to continue to work with EPA to lessen the problems of overlapping jurisdiction. In its comment on this subject, EPA asked that we amend our definition of "breakout tank" to adhere to the Congressional intent that we regulate only those storage tanks that are "incidental to pipeline transportation."

The agency suggested that doing so would require us to exclude tanks that serve non-pipeline modes of transportation.

First, it is important to point out that our current definition of “breakout tank” was adopted with full cognizance that our statutory authority over hazardous liquid storage tanks is limited to tanks that are incidental to pipeline transportation (46 FR 38358; July 27, 1981). We continue to consider this limitation to bar the regulation of storage tanks used exclusively in non-pipeline modes of transportation, but not to bar the regulation of tanks used intermodally with pipelines, such as breakout tanks that also serve cargo vessels, tank cars, or tank trucks. The application of Part 195 to intermodal breakout tanks was an issue in the case of *Exxon Corporation v. United States Secretary of Transportation* (978 F.Supp. 946), and the court concluded the tank in question was subject to Part 195.

Indeed, we believe that safety and environmental protection are enhanced under our definition of “breakout tank”. The regulations we are issuing today incorporate up-to-date pipeline industry safety practices that were recently developed by expert engineers to prevent significant storage tank accidents. For this reason, we think these regulations may be more appropriate than EPA’s SPCC rules to prevent pipeline breakout tank accidents. And excluding certain categories of tanks from the regulations as a way of minimizing regulatory overlap may not be in the public interest. The members of our Technical Hazardous Liquid Pipeline Safety Standards Committee who represent environmental interests supported the NPRM’s approach to environmental protection when the committee discussed the merits of the NPRM.

Nevertheless, we are concerned that the industry faces overlapping federal storage tank regulations at

intermodal transportation terminals. While the 1971 MOU applies to the Coast Guard’s and EPA’s regulatory authority under the Federal Water Pollution Control Act, we cannot ignore its spillover effect on our own regulatory program. Therefore, we will continue to talk to EPA officials hopefully to reach agreement on the best way for each agency to exercise its regulatory authority at intermodal transportation terminals without creating undue burdens on industry. In this regard, we will work to (1) clarify each agency’s jurisdiction to issue pollution prevention and response planning regulations, and define which facilities are jointly regulated and which are exclusively subject to EPA or RSPA regulations; (2) develop a way to resolve site-specific jurisdictional disputes; (3) develop information that explains each agency’s jurisdiction at intermodal facilities; (4) jointly oversee operator compliance; (5) address response preparedness issues at certain facilities; and (6) commit additional resources to regional response activities.

Anhydrous Ammonia Tanks

TFI argued that many of the proposed rules were not appropriate for anhydrous ammonia breakout tanks. It said that because of their unique characteristics, anhydrous ammonia breakout tanks are not treated the same as petroleum breakout tanks in matters of design, construction, operation, and maintenance. TFI listed various problems it saw with the proposed rules and, in some cases, recommended alternative consensus standards. This commenter advised that we either exclude anhydrous ammonia breakout tanks from the final rules or adopt appropriate requirements for these tanks.

Because the existing Part 195 standards that apply to breakout tanks apply equally to anhydrous ammonia and petroleum tanks, we did not question whether the proposed refer-

ences to API and NFPA standards would be suitable for both types of tanks. Now, however, in view of TFI’s comment and having no information to the contrary, we are hesitant to impose on operators of anhydrous ammonia breakout tanks any of the proposed rules that we believe might not be wholly appropriate for such tanks. Therefore, we are adding a sentence to the new §195.1(c) to exclude anhydrous ammonia breakout tanks from final Secs. 195.132(b), 195.205(b), 195.242(c) and (d), 195.264(b) and (e), 195.307, 195.428(c) and (d), and 195.432(b) and (c). At the same time, we will continue to monitor the safety performance of anhydrous ammonia breakout tanks and take any further rulemaking action that is warranted, including referencing appropriate consensus standards.

Riveted and Bolted Tanks

EPA said the proposed rules do not sufficiently address problems on riveted and bolted tanks. These tanks, it said, are usually older and more susceptible to leaks and their bottoms require different inspection methods. API, however, pointed out that API Standard 653 covers the integrity maintenance of riveted tanks and specifically addresses older tanks. API also said most transportation tanks are welded and that bolted tanks are used in the exploration and production sector of the oil industry.

Besides API Standard 653, we believe several other consensus standards we proposed to reference apply to riveted tanks: API Recommended Practice 651, API Recommended Practice 652, API Recommended Practice 2003, API Recommended Practice 2350, API Standard 2000, API Publication 2026, and NFPA 30. Moreover, our safety data do not indicate that additional requirements are needed to combat leakage problems in older riveted tanks. For example, in its breakout tank report

(discussed in the NPRM), the Texas Transportation Institute found that the general condition and appearance of the older riveted tanks it investigated were excellent. Although EPA correctly observed that riveted tank inspection differs from welded tank inspection, the NPRM did not propose rules for the methods of inspecting either welded or riveted tanks.

As to bolted tanks, our experience shows that these tanks are used primarily to store field production, and few, if any, of these tanks are used as breakout tanks subject to Part 195. Any bolted breakout tanks that do exist are covered by existing Part 195 requirements and are subject to inspection by federal and state pipeline safety enforcement personnel.

Operator Error

EPA stated that API standards do not address the problem of operator error, which accounts for a large percentage of pipeline spills. EPA suggested operator personnel should receive proper training, and after a spill, operators should review their training practices to see if changes are needed to prevent spills from recurrence based on operator error.

The NPRM did not propose training requirements because existing §195.403 requires breakout tank operators to have a detailed training program for operating and maintenance personnel. Under this program, operators periodically review personnel performances and change the training as necessary to make it effective. In addition, in a separate proceeding, we have proposed new rules on the qualification of personnel to perform safety-related tasks (63 FR 57269; Oct. 27, 1998). We intend to issue a final rule on the qualification of personnel in the near future.

Section 195.205(b)(2)

In this section, we proposed that the repair, alteration, and reconstruction of breakout tanks built to API Specification 12F, API Standard 620, or API Standard 2510 be done in accordance with those respective standards. API commented that because API Standard 2510 applies to the design and construction of new tanks and has limited application to existing tanks, the reference to API Standard 2510 may be confusing. It suggested that the references in proposed §195.205(b)(2) be stated more specifically to refer to the “design, welding, examination, and material requirements of those respective standards.” API also suggested that we add a sentence to proposed §195.205(b)(2) to refer to API 510, “Pressure Vessel Inspection Code: Maintenance Inspection, Rating, Repair, and Alteration,” for regulation on the repairs and alteration of tanks built to API Standard 2510.

Based on this comment, final §195.205(b)(2) contains more specific references. And we have added a new paragraph under §195.205(b)(3) regarding use of API 510 for repairs, alteration and reconstruction of high pressure tanks.

Section 195.264

We proposed to increase the present requirements of §195.264 related to spill containment and relief venting. In proposed §195.264(b)(1)(i), we referenced section 2-3.4.3 of NFPA 30 for secondary containment by impounding around a breakout tank. But we proposed to apply the specific requirements in section 2-3.4.3 concerning “Class I [flammable] liquids” to all “hazardous liquids” subject to Part 195. API objected to this proposed expansion of the Class I-specific requirements as inappropriate because these requirements are long-standing, well understood, and technically sound. NFPA

pointed out that our Class I proposal created the false impression that section 2-3.4.3 of NFPA 30 is limited to Class I liquids, when, in fact, other hazardous liquids are covered as well. Upon reconsideration, we believe the proposed expansion of specific Class I liquid requirements was not consistent with the intent of the NPRM to require the industry to follow consensus standards. Therefore, we have not adopted our proposal replacing “hazardous liquids” in the final rule.

API also objected to the term “secondary containment” in proposed §195.264(b). It said section 2-3.4.3 of NFPA 30 applies to impoundment, which better describes the function of diked areas around tanks. We agree and have substituted “impoundment” for “secondary containment” in the final rule.

NFPA suggested we reference additional sections of NFPA 30 in §195.264: section 2-9.3 for security, and sections 2-3.5 and 2-3.6 for normal and emergency venting. The latter two sections, NFPA said, would eliminate the need for references to API documents in proposed §195.264(e)(1)-(3). Since the NPRM did not propose to substantively change the existing breakout tank security requirement (§195.264(b)), we did not consider referencing section 2-9.3 of NFPA 30 in the final rule. Further, even though the suggested NFPA 30 sections may yield comparable results, in the absence of negative comments about the proposed references to API documents for normal and emergency venting, we are leaving these API references in the final rule.

EPA described what it called “inherent weaknesses” in the spill control provisions of NFPA 30. Specifically, EPA said NFPA 30 limits dike height, does not require free board space for precipitation, and allows alternatives that can compromise environmental protection. It also noted the lack of requirements for certification by a professional engi-

neer, spill history records, predictions of spill rate and direction, inspection of impoundment, and response plans with commitment of personnel and equipment. EPA suggested we adopt its SPCC regulations instead of the NFPA requirements. Doing so, EPA said, would result in better environmental protection. But API contended the SPCC regulation is inappropriate for pipeline breakout tanks because it addresses entire plants and contains specific requirements for non-transportation facilities.

The weaknesses EPA found with the spill control provisions of NFPA 30 either do not exist or are mitigated by other considerations. Section 2-3.4.3(f) allows dikes of any height that provide normal access to the enclosure. The need for free board must be considered as required by appendix A-2-3.4.3(b). Although section 1-4 permits equivalent alternatives, as we discussed above under the "Engineering Judgment" heading, this provision is not included in the parts of NFPA 30 incorporated by reference in §195.264. None of the Part 195 rules require operators to obtain professional engineer certifications to demonstrate compliance, and we do not consider the lack of such a requirement in NFPA 30 to be a shortcoming in the regulation of spill control. Breakout tank operators have to keep records of spills under §195.404(b), and §195.402(c)(4) requires operators to consider potential spill characteristics in determining which facilities may require immediate response in the event of a failure or malfunction. The construction of impoundment must be inspected as required by §195.204, and spill response plans backed by committed resources are required by §195.402(e) and 49 CFR Part 194. In conclusion, we are including the proposed references to NFPA 30 in final §195.264. As we said above in the discussion on overlapping federal regulation, because the final rules are directed primarily at preventing breakout tank

accidents, we do not think the SPCC regulations would result in better environmental protection.

Section 195.307

API suggested we take the word "pressure" out of the title of proposed §195.307, "Pressure testing breakout tanks." API said not all testing under the section is pressure testing.

This comment probably arose because pressure testing is mentioned only in paragraph (e), while paragraphs (a)-(d) deal with pneumatic or hydrostatic testing. However, since pneumatic and hydrostatic testing are forms of pressure testing, we have kept the proposed title in the final rule.

Section 195.405

We proposed, under §195.405(b), to reduce the hazards associated with maintenance of tank floating roofs by requiring operators to consider adding the safety practices of API Publication 2026 to their operation and maintenance manuals. AMOCO contended this proposal was unnecessary because it duplicates similar requirements in the Occupational Safety and Health Administration's confined space regulation (29 CFR 1910.146).

We considered this comment and decided to adopt the proposed rule as final. OSHA's regulation has general application to a variety of confined spaces, but API Publication 2026 deals specifically with entering and exiting floating roofs. Also, if AMOCO's assessment is correct, operators's existing procedures should already satisfy the guidelines in API Publication 2026. Moreover, as 29 CFR 1910.5(b) indicates, OSHA's confined space requirements do not apply to employee working conditions for which another federal agency prescribes regulations affecting occupational safety or health. This provision reduces the potential for problems to

result from duplication of any OSHA requirement in 29 CFR Part 1910.

Section 195.428 (c)-(e)

We proposed, under §195.428(c) and (d), that within 18 months of the final rule certain tanks have overfill protection systems that meet API Recommended Practice 2350, or meet API Standard 2510 if the tank was built to that standard. API, AMOCO, and TEPPCO argued that we should not require existing tanks to have these systems. It said applying the proposed rule retroactively to tanks without such systems would require significant expenditures for conduit, wiring, possibly degassing, and temporary removal of the tank from service.

For these same reasons, we did not intend to apply proposed §195.428(c) and (d) retroactively. Consistent with our statement that the proposed rules would result in minimal or no cost for operators (63 FR 27908), we intended that operators install overfill protection systems as they customarily do: when constructing new tanks or significantly altering existing tanks. Therefore, the final rule clarifies this limited application, which begins 18 months from today. In addition, for clarity and simplification, we have combined proposed paragraphs (c) and (d) into final paragraph (c). Final paragraph (d) restates proposed paragraph (e) concerning inspecting and testing overfill protection systems.

Section 195.432

In this section we proposed that starting 18 months after the final rule is published, the annual inspection now required by existing §195.432 for all breakout tanks include, for carbon and low alloy steel, welded or riveted, non-refrigerated tanks, an integrity inspection under section 4 of API Standard 653.

API, AMOCO, and EPA noted a potential conflict between the annual inspection deadline and the different intervals that section 4 of API Standard 653 provides for various types of inspections. Of particular concern were the inspection intervals based on corrosion rate, which in some cases could be up to 20 years. API recommended that we drop the annual inspection requirement and merely require operators to inspect breakout tanks according to section 4 of API Standard 653. EPA also questioned the annual inspection requirement because it does not define the required inspections.

We agree that the existing and proposed requirements could create a conflict of inspection intervals. So final §195.432(a) includes an exception for tanks that are subject to the other inspection requirements of §195.432. We did not eliminate the existing annual inspection requirement as API suggested, because it provides for maintenance inspection of breakout tanks that are not subject to the new integrity inspection requirements, such as anhydrous ammonia tanks and non-steel tanks.

API also pointed out that some tank bottoms cannot be inspected under API Standard 653 because the steel bottom has been repaired by a concrete cover. API recommended that in cases like this we allow operators to use an alternative method, such as a risk-based analysis, to assess bottom integrity. Under final §195.432(b), operators must inspect the integrity of atmospheric and low-pressure tanks according to section 4 of API Standard 653. However, in view of API's comment, the final rule allows an operator to use an assessment technique included in its operations and maintenance manual for tank bottoms to which access is prevented by structural conditions.

In another comment on proposed §195.432, API suggested that we incorporate by reference API 510, "Pressure Vessel Inspection Code:

Maintenance Inspection, Rating, Repair, and Alteration," as the inspection standard for high-pressure tanks built to API Standard 2510. API said API 510 is the appropriate inspection standard for such tanks. We agree that this standard is more appropriate than API Standard 653 for such tanks and it is incorporated by reference in final §195.432(c).

The references to consensus standards do not include parts of those standards that are not directly related to carrying out inspections. For example, parts of section 4 of API Standard 653 concerning records, reports, and inspector qualifications (Sections 4.8-4.10) are not incorporated by reference because these parts do not govern the process of inspection. In addition, §195.404(c)(3) requires inspection records. And, as previously mentioned, personnel qualification is covered by §195.403 and is the subject of rules proposed in Docket No. RSPA-98-3783 (63 FR 57269; Oct. 27, 1998).

AMOCO was concerned about the application of inspection intervals to tanks already in compliance with the new integrity inspection requirements and tanks not in compliance. To clarify this matter, final §195.432(d) provides that a particular interval begins on the date this final rule document takes effect, May 3, 1999, or the operator's last recorded date of the inspection, whichever is earlier. We dropped the proposed 18-month compliance time from the final §195.432 because we considered it unnecessary in view of the inspection intervals specified by the referenced standards.

Advisory Committee

• On May 6, 1998, in Washington, DC, we briefed the Technical Hazardous Liquid Pipeline Safety Standards Committee (THLPSSC) about this rule. This committee voted to accept the NPRM provided that we

consider adopting API Publication 340.

• On November 6, 1998, in Washington, DC, we briefed THLPSSC about comments received and changes to expect in the final rule. Also at this time, we reviewed a five page report on API publication 340 prepared by SPEC Consulting Services for API's Health and Environment Affairs Department. This report was sent to the THLPSSC committee on May 14, 1998. This report concluded that API publication 340 need not be adopted in this rulemaking. We agreed because, (1) the scope of API publication 340 is too broad for this rulemaking; (2) four API standards referenced in API 340 are already adopted in this rulemaking; (3) this rulemaking goes beyond API Publication 340, and adopts six other API consensus standards. The THLPSSC agreed with our conclusion. A copy of this report is in the docket.

Regulatory Analyses and Notices

A. Executive Order 12866 and DOT Regulatory Policies and Procedures

The Department of Transportation (DOT) does not consider this action to be a significant regulatory action under Section 3(f) of Executive Order 12866 (58 FR 51735; October 4, 1993) and this rule was not reviewed by the Office of Management and Budget. DOT does not consider this action significant under DOT's regulatory policies and procedures (44 FR 11034; February 26, 1979).

This rule would amend the regulations for breakout tanks to include the incorporation by reference of certain of the latest consensus standards for above ground storage tanks. The adoption of consensus standards is consistent with the President's goal of regulatory reinvention and improvement of customer service to the American people. There is minimal or no cost for operators of

breakout tanks to comply with this rule because these consensus standards have been developed and implemented by industry organizations to ensure the safety of above ground petroleum storage tanks.

The standards for steel storage tanks were specifically developed by the API. API is the major petroleum industry trade organization and many of its members are operators of petroleum pipelines with tank farms. Additionally, the standard for secondary containment is taken from an NFPA code that is a widely used consensus standard for the design of diking (containment by impounding) for above ground storage tanks. The NFPA is an association with a membership of more than 67,000 individuals and over 100 national trade and professional organizations. Its mission is to reduce the burden of fire on the quality of life by advocating scientifically based consensus codes and standards, research, and education for fire and safety issues.

The operators of breakout tanks storing hazardous liquids are very familiar with these API storage tank and NFPA diking standards because they have been extensively implemented at pipeline terminals throughout the United States. Conversations with an industry storage tank organization representing medium and smaller operators of breakout tanks confirm that most of their members are already complying with the tank standards. Because the economic impact of this rule is minimal, the incorporation by reference of these industry standards does not warrant preparation of a Regulatory Evaluation.

For several years, OMB Circular A-119, "Federal Participation in the Development and Use of Voluntary Standards", encouraged, but did not require, agencies to participate in consensus standards bodies and to adopt voluntary consensus standards whenever possible. The National Technology Transfer and Advance-

ment Act of 1995 (NTTAA, Pub. L. 104-113) codified and expanded the participation and reporting requirement of OMB Circular A-119. Federal agencies and departments are now required to use technical standards that are developed and adopted by voluntary consensus bodies, where practicable. RSPA prescribed API and NFPA standards for petroleum storage tanks meets the goals and requirements set forth in both OMB Circular A-119 and NTTAA.

B. Regulatory Flexibility Act

As discussed above, RSPA is incorporating consensus standards that were developed and published by authoritative organizations associated with the petroleum industry. Consequently, these safety standards are well known and have been implemented by operators of aboveground storage tanks at hazardous liquid pipeline terminals throughout the United States. RSPA has had conversations with an operators' association representing these tank farms and with other persons and those parties do not expect this rule to have a significant economic impact on the smaller operators of breakout tanks. Moreover, in the event that some operators of breakout tanks have not yet implemented all the safety-related items in these consensus standards, the regulations prescribed in this final rule would allow operators 18 months for compliance after the date of publication of the final rule.

Therefore, based on the facts available which indicate the anticipated minimal impact of this rulemaking action, I certify, pursuant to Section 605 of the Regulatory Flexibility Act (5 U.S.C. 605), that this rulemaking action will not have a significant economic impact on a substantial number of small entities.

RSPA, in the proposed rule, had requested comments from small entities which might be impacted by this rule. We received one comment from

an association which includes small operators. This association stated that most, if not all, members already adhere to the consensus tank standards adopted by this rulemaking. This supports our earlier conclusion that this rule will have no significant impact on substantial number of small entities.

C. Executive Order 126120

This rule will not have substantial direct effects on states, on the relationship between the federal government and the states, or on the distribution of power and responsibilities among the various levels of government. Therefore, in accordance with the Executive Order 12612 (52 FR 41685; Oct. 30, 1987), RSPA has determined that the action does not have sufficient federalism implications to warrant preparation of a Federalism Assessment.

D. Executive Order 13084

This rule has been analyzed in accordance with the principles and criteria contained in Executive Order 13084 ("Consultation and Coordination with Indian Tribal Governments"). Because this rule would not significantly or uniquely affect the communities of the Indian tribal governments, the funding and consultation requirements of this Executive Order do not apply.

E. Unfunded Mandates

This rule does not impose unfunded mandates under the Unfunded Mandates Reform Act of 1995. It does not result in costs of over \$100 million or more to either state, local, or tribal governments, in the aggregate, or to the private sector, and is the least burdensome alternative that achieves the objective of the rule.

F. Paperwork Reduction Act

The API Standard 653 includes sample checklists, provided for the operators' periodic inspection of welded or riveted, non-refrigerated, atmospheric pressure, aboveground steel storage tanks. The checklists identify the tank components and auxiliary items that should be considered for inspection and provide blank spaces for insertion of the inspection date and notation of the inspector's comments (if any). The use of the checklists improves the effectiveness and minimizes the paperwork burden associated with the existing inspection requirements in 49 CFR 195.432. This API standard has been published for several years and during that time it has been available to all operators of petroleum storage tanks (i.e. refinery, marketing, production and pipeline).

For the API Recommended Practices referred to in this rulemaking, it is stated that the operator would be expected to follow the provisions unless the operator notes in the procedural manual the reasons why compliance with all or certain provisions is not necessary for the safety of a particular breakout tank or tanks. Each operator's procedural manual already requires the inclusion and updating of similar safety-related procedures and practices, so that such annotation is consistent with the long standing function of the procedural manual. Moreover, most operators already follow the API Recommended Practices that are prescribed for adoption and would not need to make such an annotation in the procedural manual.

Therefore, there is little or no additional burden and no paperwork analysis is required for this rule.

G. National Environmental Policy Act

RSPA has analyzed this action for purposes of the National Envi-

ronmental Policy Act (42 U.S.C. 4321 et seq.) and has determined that this action would not significantly affect the quality of the human environment. An Environmental Assessment and a Finding of No Significant Impact are in the docket.

H. Impact on Business Processes and Computer Systems

Many computers that use two digits to keep track of dates will, on January 1, 2000, recognize "double zero" not as 2000 but as 1900. This glitch, the Year 2000 problem, could cause computers to stop running or to start generating erroneous data. The Year 2000 problem poses a threat to the global economy in which Americans live and work. With the help of the President's Council on Year 2000 Conversion, Federal agencies are reaching out to increase awareness of the problem and to offer support. We do not want to impose new requirements that would mandate business process changes when the resources necessary to implement those requirements would otherwise be applied to the Year 2000 problem.

This rule does not specify business process changes or require modifications to computer systems. Because this rule apparently does not affect organizations' ability to respond to the Year 2000 problem, we do not intend to delay the effectiveness of the requirements in this rule.

List of Subjects in 49 CFR Part 195

Incorporation by reference, Breakout tanks, Hazardous liquids, Carbon dioxide, Petroleum, Pipeline safety, Reporting and recordkeeping requirements.

In consideration of the foregoing, RSPA amends part 195 of title 49 of the Code of Federal Regulations as follows:

PART 195--TRANSPORTATION OF HAZARDOUS LIQUIDS BY PIPELINE

1. The authority citation for part 195 continues to read as follows:

Authority: 49 U.S.C. 5103, 60102, 60104, 60108, 60109, 60118; and 49 CFR 1.53.

2. Section 195.1(c) is revised to read as follows:

§195.1 Applicability.

* * * * *

(c) Breakout tanks subject to this part must comply with requirements that apply specifically to breakout tanks and, to the extent applicable, with requirements that apply to pipeline systems and pipeline facilities. If a conflict exists between a requirement that applies specifically to breakout tanks and a requirement that applies to pipeline systems or pipeline facilities, the requirement that applies specifically to breakout tanks prevails. Anhydrous ammonia breakout tanks need not comply with Secs. 195.132(b), 195.205(b), 195.242 (c) and (d), 195.264 (b) and (e), 195.307, 195.428 (c) and (d), and 195.432 (b) and (c).

3. Section 195.3 is amended by adding paragraph (b)(7), by revising the introductory text of paragraph (c), by revising paragraphs (c)(2) and (c)(3)(v), and by adding paragraph (c)(6), to read as follows:

§195.3 Matter incorporated by reference.

* * * * *

(b) * * *

(7) National Fire Protection Association (NFPA), 11 Tracy Drive, Avon, MA 02322.

(c) The full titles of publications incorporated by reference wholly or

partially in this part are as follows. Numbers in parentheses indicate applicable editions:

* * * * *

(2) American Petroleum Institute (API):

(i) API 510 "Pressure Vessel Inspection Code: Maintenance Inspection, Rating, Repair, and Alteration" (8th edition, June 1997).

(ii) API Publication 2026 "Safe Access/Egress Involving Floating Roofs of Storage Tanks in Petroleum Service" (2nd edition, April 1998).

(iii) API Recommended Practice 651 "Cathodic Protection of Aboveground Petroleum Storage Tanks" (2nd edition, December 1997).

(iv) API Recommended Practice 652 "Lining of Aboveground Petroleum Storage Tank Bottoms" (2nd edition, December 1997).

(v) API Recommended Practice 2003 "Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents" (6th edition, December 1998).

(vi) API Recommended Practice 2350 "Overfill Protection for Storage Tanks In Petroleum Facilities" (2nd edition, January 1996).

(vii) API Specification 5L "Specification for Line Pipe" (41st edition, 1995).

(viii) API Specification 6D "Specification for Pipeline Valves (Gate, Plug, Ball, and Check Valves)" (21st edition, 1994).

(ix) API Specification 12F "Specification for Shop Welded Tanks for Storage of Production Liquids" (11th edition, November 1994).

(x) API Standard 1104 "Welding Pipelines and Related Facilities" (18th edition, 1994).

(xi) API Standard 620 "Design and Construction of Large, Welded, Low-Pressure Storage Tanks" (9th edition, February 1996, Including Addenda 1 and 2).

(xii) API Standard 650 "Welded Steel Tanks for Oil Storage" (9th edition, July 1993 (Including Addenda 1 through 4).

(xiii) API Standard 653 "Tank Inspection, Repair, Alteration, and Reconstruction" (2nd edition, December 1995, including Addenda 1, December 1996).

(xiv) API Standard 2000 "Venting Atmospheric and Low-Pressure Storage Tanks" (4th edition, September 1992).

(xv) API Standard 2510 "Design and Construction of LPG Installations" (7th edition, May 1995).

(3) * * *

(v) ASME Boiler and Pressure Vessel Code, Section VIII "Pressure Vessels," Divisions 1 and 2 (1995 edition with 1995 Addenda).

* * * * *

(6) National Fire Protection Association (NFPA):

(i) ANSI/NFPA 30 "Flammable and Combustible Liquids Code," (1996).

(ii) [Reserved]

4. Section 195.132 is revised to read as follows:

§195.132 Design and construction of aboveground breakout tanks.

(a) Each aboveground breakout tank must be designed and constructed to withstand the internal pressure produced by the hazardous liquid to be stored therein and any anticipated external loads.

(b) For aboveground breakout tanks first placed in service after October 2, 2000, compliance with paragraph (a) of this section requires one of the following:

(1) Shop-fabricated, vertical, cylindrical, closed top, welded steel tanks with nominal capacities of 90 to 750 barrels (14.3 to 119.2 m³) and with internal vapor space pressures that are approximately atmospheric must be designed and constructed in accordance with API Specification 12F.

(2) Welded, low-pressure (i.e., internal vapor space pressure not greater than 15 psig (103.4 kPa)),

carbon steel tanks that have wall shapes that can be generated by a single vertical axis of revolution must be designed and constructed in accordance with API Standard 620.

(3) Vertical, cylindrical, welded steel tanks with internal pressures at the tank top approximating atmospheric pressures (i.e., internal vapor space pressures not greater than 2.5 psig (17.2 kPa), or not greater than the pressure developed by the weight of the tank roof) must be designed and constructed in accordance with API Standard 650.

(4) High pressure steel tanks (i.e., internal gas or vapor space pressures greater than 15 psig (103.4 kPa)) with a nominal capacity of 2000 gallons (7571 liters) or more of liquefied petroleum gas (LPG) must be designed and constructed in accordance with API Standard 2510.

5. Section 195.205 is added to read as follows:

§195.205 Repair, alteration and reconstruction of aboveground breakout tanks that have been in service.

(a) Aboveground breakout tanks that have been repaired, altered, or reconstructed and returned to service must be capable of withstanding the internal pressure produced by the hazardous liquid to be stored therein and any anticipated external loads.

(b) After October 2, 2000, compliance with paragraph (a) of this section requires the following for the tanks specified:

(1) For tanks designed for approximately atmospheric pressure constructed of carbon and low alloy steel, welded or riveted, and non-refrigerated and tanks built to API Standard 650 or its predecessor Standard 12C, repair, alteration, and reconstruction must be in accordance with API Standard 653.

(2) For tanks built to API Specification 12F or API Standard 620, the

repair, alteration, and reconstruction must be in accordance with the design, welding, examination, and material requirements of those respective standards.

(3) For high pressure tanks built to API Standard 2510, repairs, alterations, and reconstruction must be in accordance with API 510.

6. Section 195.242 is amended by adding paragraphs (c) and (d) to read as follows:

§195.242 Cathodic protection system.

* * * * *

(c) For the bottoms of above-ground breakout tanks with greater than 500 barrels (79.5 m³) capacity built to API Specification 12F, API Standard 620, or API Standard 650 (or its predecessor Standard 12C), the installation of a cathodic protection system under paragraph (a) of this section after October 2, 2000, must be in accordance with API Recommended Practice 651, unless the operator notes in the procedural manual (§195.402(c)) why compliance with all or certain provisions of API Recommended Practice 651 is not necessary for the safety of a particular breakout tank.

(d) For the internal bottom of aboveground breakout tanks built to API Specification 12F, API Standard 620, or API Standard 650 (or its predecessor Standard 12C), the installation of a tank bottom lining after October 2, 2000, must be in accordance with API Recommended Practice 652, unless the operator notes in the procedural manual (§195.402(c)) why compliance with all or certain provisions of API Recommended Practice 652 is not necessary for the safety of a particular breakout tank.

7. Section 195.264 is revised to read as follows:

§195.264 Impoundment, protection against entry, normal/emergency venting or pressure/vacuum relief for aboveground breakout tanks.

(a) A means must be provided for containing hazardous liquids in the event of spillage or failure of an aboveground breakout tank.

(b) After October 2, 2000, compliance with paragraph (a) of this section requires the following for the aboveground breakout tanks specified:

(1) For tanks built to API Specification 12F, API Standard 620, and others (such as API Standard 650 or its predecessor Standard 12C), the installation of impoundment must be in accordance with the following sections of NFPA 30:

(i) Impoundment around a breakout tank must be installed in accordance with Section 2-3.4.3; and

(ii) Impoundment by drainage to a remote impounding area must be installed in accordance with Section 2-3.4.2.

(2) For tanks built to API Standard 2510, the installation of impoundment must be in accordance with Section 3 or 9 of API Standard 2510.

(c) Aboveground breakout tank areas must be adequately protected against unauthorized entry.

(d) Normal/emergency relief venting must be provided for each atmospheric pressure breakout tank. Pressure/vacuum-relieving devices must be provided for each low-pressure and high-pressure breakout tank.

(e) For normal/emergency relief venting and pressure/vacuum-relieving devices installed on aboveground breakout tanks after October 2, 2000, compliance with paragraph (d) of this section requires the following for the tanks specified:

(1) Normal/emergency relief venting installed on atmospheric pressure tanks built to API Specification 12F must be in accordance with

Section 4, and Appendices B and C, of API Specification 12F.

(2) Normal/emergency relief venting installed on atmospheric pressure tanks (such as those built to API Standard 650 or its predecessor Standard 12C) must be in accordance with API Standard 2000.

(3) Pressure-relieving and emergency vacuum-relieving devices installed on low pressure tanks built to API Standard 620 must be in accordance with Section 7 of API Standard 620 and its references to the normal and emergency venting requirements in API Standard 2000.

(4) Pressure and vacuum-relieving devices installed on high pressure tanks built to API Standard 2510 must be in accordance with Sections 5 or 9 of API Standard 2510.

8. Section 195.307 is added to read as follows:

§195.307 Pressure testing above-ground breakout tanks.

(a) For aboveground breakout tanks built to API Specification 12F and first placed in service after October 2, 2000, pneumatic testing must be in accordance with section 5.3 of API Specification 12F.

(b) For aboveground breakout tanks built to API Standard 620 and first placed in service after October 2, 2000, hydrostatic and pneumatic testing must be in accordance with section 5.18 of API Standard 620.

(c) For aboveground breakout tanks built to API Standard 650 and first placed in service after October 2, 2000, hydrostatic and pneumatic testing must be in accordance with section 5.3 of API Standard 650.

(d) For aboveground atmospheric pressure breakout tanks constructed of carbon and low alloy steel, welded or riveted, and non-refrigerated and tanks built to API Standard 650 or its predecessor Standard 12C that are returned to service after October 2, 2000, the necessity for the hydrostatic

testing of repair, alteration, and reconstruction is covered in section 10.3 of API Standard 653.

(e) For aboveground breakout tanks built to API Standard 2510 and first placed in service after October 2, 2000, pressure testing must be in accordance with ASME Boiler and Pressure Vessel Code, Section VIII, Division 1 or 2.

9. Section 195.405 is added to read as follows:

§195.405 Protection against ignitions and safe access/egress involving floating roofs.

(a) After October 2, 2000, protection provided against ignitions arising out of static electricity, lightning, and stray currents during operation and maintenance activities involving aboveground breakout tanks must be in accordance with API Recommended Practice 2003, unless the operator notes in the procedural manual (§195.402(c)) why compliance with all or certain provisions of API Recommended Practice 2003 is not necessary for the safety of a particular breakout tank.

(b) The hazards associated with access/egress onto floating roofs of in-service aboveground breakout tanks to perform inspection, service, maintenance or repair activities (other than specified general considerations, specified routine tasks or entering tanks removed from service for cleaning) are addressed in API Publication 2026. After October 2, 2000, the operator must review and consider the potentially hazardous conditions, safety practices and procedures in API Publication 2026 for inclusion in the procedure manual (§195.402(c)).

10. Section 195.416 (j) is added to read as follows:

§195.416 External corrosion control.

* * * * *

(j) For aboveground breakout tanks where corrosion of the tank bottom is controlled by a cathodic protection system, the cathodic protection system must be inspected to ensure it is operated and maintained in accordance with API Recommended Practice 651, unless the operator notes in the procedure manual (§195.402(c)) why compliance with all or certain provisions of API Recommended Practice 651 is not necessary for the safety of a particular breakout tank.

11. Section 195.428 is amended by revising the title and by adding paragraphs (c) and (d) to read as follows:

§195.428 Overpressure safety devices and overfill protection systems.

* * * * *

(c) Aboveground breakout tanks that are constructed or significantly altered according to API Standard 2510 after October 2, 2000, must have an overfill protection system installed according to section 5.1.2 of API Standard 2510. Other aboveground breakout tanks with 600 gallons (2271 liters) or more of storage capacity that are constructed or significantly altered after October 2, 2000, must have an overfill protection system installed according to API Recommended Practice 2350. However, operators need not comply with any part of API Recommended Practice 2350 for a particular breakout tank if the operator notes in the manual required by §195.402 why compliance with that part is not necessary for safety of the tank.

(d) After October 2, 2000, the requirements of paragraphs (a) and (b) of this section for inspection and testing of pressure control equipment

apply to the inspection and testing of overfill protection systems.

12. Section 195.432 is revised to read as follows:

§195.432 Inspection of in-service breakout tanks.

(a) Except for breakout tanks inspected under paragraphs (b) and (c) of this section, each operator shall, at intervals not exceeding 15 months, but at least once each calendar year, inspect each in-service breakout tank.

(b) Each operator shall inspect the physical integrity of in-service atmospheric and low-pressure steel aboveground breakout tanks according to section 4 of API Standard 653. However, if structural conditions prevent access to the tank bottom, the bottom integrity may be assessed according to a plan included in the operations and maintenance manual under §195.402(c)(3).

(c) Each operator shall inspect the physical integrity of in-service steel aboveground breakout tanks built to API Standard 2510 according to section 6 of API 510.

(d) The intervals of inspection specified by documents referenced in paragraphs (b) and (c) of this section begin on May 3, 1999, or on the operator's last recorded date of the inspection, whichever is earlier.

Issued in Washington, D.C. on March 22, 1999.

Kelley S. Coyner,
Administrator.

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